

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 46571 7/31/00]

[Docket No. 99-NM-215-AD; Amendment 39-11836; AD 2000-15-07]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-10 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain McDonnell Douglas Model DC-10 series airplanes, that requires a one-time detailed visual inspection of the galley power feeder cables and fuselage structure at a certain station to detect chafing or arcing damage to the cables and structure or to detect arcing damage to the insulation blankets; and corrective actions, if necessary. This AD also requires installation of spacers between the galley power feeder cable clamps and fuselage structure. This amendment is prompted by reports indicating that the galley power feeder cables chafed against a certain fuselage frame in the forward lower cargo compartment, which resulted in electrical arcing. The actions specified by this AD are intended to prevent such chafing and arcing due to insufficient clearance between the cables and the airplane structure, which could result in smoke and fire in the forward lower cargo compartment.

DATES: Effective September 4, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of September 4, 2000.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Natalie Phan-Tran, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5343; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain McDonnell Douglas Model DC-10 series airplanes was published in the **Federal Register** on January 26, 2000 (65 FR 4182). That action proposed to require a one-time detailed visual inspection of the galley power feeder cables and fuselage structure at a certain station to detect chafing or arcing damage to the cables and structure or to detect arcing damage to the insulation blankets; and corrective actions, if necessary. That action also proposed to require installation of spacers between the galley power feeder cable clamps and fuselage structure.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Support for Proposed Rule

Several commenters support the proposed rule.

Request to Extend Compliance Time

One commenter requests that the compliance time from accomplishing the detailed visual inspection be extended from the proposed 6 months to 18 months. The commenter states that the inspection should be accomplished during a heavy maintenance visit to ensure that proper access can be obtained, all discrepancies are identified, and that any on-condition repairs can be performed in the proper maintenance environment.

The FAA does not concur. In developing an appropriate compliance time for this inspection, the FAA considered not only the degree of urgency associated with addressing the subject unsafe condition, but the manufacturer's recommendation as to an appropriate compliance time, the availability of required parts, and the practical aspect of accomplishing the inspection within an interval of time that parallels the normal scheduled maintenance for the majority of affected operators. In light of these items, the FAA has determined that 6 months for compliance is appropriate. However, under the provisions of paragraph (b) of the final rule, the FAA may approve requests for adjustments to the compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety.

Request to Revise Work Hour Estimate

One commenter requests that the work hour estimate for accomplishing the proposed inspection be revised from 2 work hours to 4 work hours. The commenter states that the proposed inspection alone will require 4 work hours. The commenter notes that any on-condition repairs will add additional time to this inspection, and that any structural repairs that may be needed will significantly increase the hours necessary to accomplish the requirements of the proposed AD.

The FAA does not concur. The work hour estimate (i.e., 2 work hours) in the proposed AD reflects the time necessary to accomplish the required inspection (1 work hour) and installation of spacers (1 work hour). The FAA used the work hours specified in McDonnell Douglas Alert Service Bulletin DC10-24A162, dated July 28, 1999 (which is referenced in the AD as the appropriate source of service information for accomplishment of the required inspection and installation). In addition, the economic analysis of the AD is limited only to the cost of actions actually required by the rule. It does not consider the costs of "on condition" actions, such as repairing a crack if one is detected during a required inspection ("repair, if necessary"). Such "on-condition" repair actions would be required to be accomplished -- regardless of AD direction -- in order to correct an unsafe condition identified in an airplane and to ensure operation of that airplane in an airworthy condition, as required by the Federal Aviation Regulations. Therefore, no change to the final rule is necessary.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

There are approximately 168 Model DC-10 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 103 airplanes of U.S. registry will be affected by this AD, that it will take approximately 2 work hours per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$12,360, or \$120 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION
P.O. BOX 26460
OKLAHOMA CITY, OKLAHOMA 73125-0460



U.S. Department
of Transportation
**Federal Aviation
Administration**

AD's are posted on the internet at <http://av-info.faa.gov>

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2000-15-07 MCDONNELL DOUGLAS: Amendment 39-11836. Docket 99-NM-215-AD.

Applicability: Model DC-10 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin DC10-24A162, dated July 28, 1999; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent chafing and arcing of the galley power feeder cables against the airplane structure due to insufficient clearance between the cables and the airplane structure, which could result in smoke and fire in the forward lower cargo compartment, accomplish the following:

Inspection, Installation of Spacers, and Corrective Actions, If Necessary

(a) Within 6 months after the effective date of this AD, perform a detailed visual inspection of the galley external power feeder cables and fuselage structure at station Y=635.000 to detect chafing or arcing damage to the cables and structure or to detect arcing damage to the insulation blankets, in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A162, dated July 28, 1999.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) If any damage or chafing is detected, prior to further flight, accomplish the actions specified in paragraphs (a)(1)(i), (a)(1)(ii), (a)(1)(iii), and (a)(1)(iv) of this AD, as applicable, in accordance with Condition 2 of the Accomplishment Instructions of the service bulletin.

(i) Repair or replace the chafed cables with new cables.

(ii) Repair the damaged frame.

(iii) Replace the damaged insulation blanket with a new blanket; however, insulation blankets made of metallized polyethyleneterephthalate (MPET) may not be used.

(iv) Install spacers between the galley power feeder cable clamps and fuselage structure.

(2) If no damage or chafing is detected, prior to further flight, install spacers between the galley power feeder cable clamps and fuselage structure in accordance with Condition 1 of the Accomplishment Instructions of the service bulletin.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A162, dated July 28, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective on September 4, 2000.

FOR FURTHER INFORMATION CONTACT: Natalie Phan-Tran, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5343; fax (562) 627-5210.

Issued in Renton, Washington, on July 19, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.